

SECTION 125

VITRIFIED CLAY PIPE

125.1 GENERAL

Vitrified clay pipe shall be extra strength, as specified in ASTM C 700 and shall be sound, durable, and well burned throughout its entire thickness.

125.2 REFERENCES

125.2.1 ASTM:

C 301 C 700
C 425

125.3 CERTIFICATION

A certification from the manufacturer shall be furnished to the ENGINEER with each shipment of pipe attesting that the pipe meets the requirements of this specification, including test reports for absorption, acid resistance, and loading tests as defined in ASTM C 301 and C 425.

125.4 MANUFACTURING REQUIREMENTS

125.4.1 SHAPE:

125.4.1.1 Pipe ends shall be square with the longitudinal axis; and sockets shall be true, circular, and concentric with the barrel of the pipe

125.4.1.2 The ends of the pipe shall be so formed that, when the pipes are laid together and the joints made, they shall constitute a continuous and uniform line of pipe and shall have a smooth and regular interior surface.

125.4.1.3 Deviation from a straight line shall not be greater than 1/16 inch per linear foot and shall be measured from a straight edge on the concave side. Variation from a true circle of the spigot or socket of the pipe shall not be greater than 3 percent of its nominal diameter.

125.4.2 STOPPERS, BRANCHES, TEES AND WYES, ENDS.

125.4.2.1 Stoppers shall be furnished with all pipes and branches that are to be left unconnected and shall be strong enough to meet the necessary load and hydrostatic requirements.

125.4.2.2 Branches, tees, and wyes of the size and quantity as required on the plans shall be furnished with connection securely and completely fastened to the barrel of the pipe in the process of manufacture.

125.5 CAUSE FOR PIPE OR FITTING REJECTION

125.5.1 Pipe and fittings must be free from injurious cracks, checks, blisters, broken extremities, or other imperfections.

125.5.2 The following imperfections in a pipe or fittings will be considered injurious and cause for rejection where not in conflict with ASTM C 700 which will govern:

125.5.2.1 A single crack in the barrel of the pipe or fitting extending through the entire thickness, regardless of the length of such crack. A single crack which extends through 1/5 of the shell thickness and is over 3 inches long. Any surface fire crack which is more than 1/16 inch wide at its widest point.

125.5.2.2 Lumps, blisters, pits, flakes, or tramped clay on the interior surface.

125.5.2.3 When the end of the pipe or fitting varies from a true circle more than 3 percent of its nominal diameter.

125.5.2.4 When a straight pipe or fitting exhibits a deviation from a straight line of more than 1/16 inch per linear foot.

125.5.2.5 Any piece broken from the end of the pipe or fitting.

125.6 TESTS

All tests shall conform to the requirements set forth in ASTM C 301, C 425, and C 700. Test results shall be furnished the ENGINEER. In addition to the stated tests, the ENGINEER may select at random pipe lengths or joints that should be tested by the CONTRACTOR, results of which will be furnished the ENGINEER.

125.7 JOINTS

Bell and spigot pipe or Plain End Pipe will be used as the method of connecting the pipes. Either rubber elastomer or polyurethane compression/sealing member of the joint will be shaped for the particular connection. These materials shall meet the requirements of ASTM C 425. For Plain End Pipe the collar used to couple the ends of the pipe shall be made from rigid unplasticized polyvinyl chloride and shall meet the requirements of ASTM C 425.

125.8 PERFORATED CLAY PIPE

This type of pipe is used in areas where ground waters are to be collected and transported to an outlet or for the purpose of a drain field for dispersion of waste water. The pipe is generally encased in gravel. Perforated clay pipe shall be extra strength pipe and shall conform to the requirements of ASTM C 700.

125.9 MEASUREMENT AND PAYMENT

Measurement and payment will be as defined in Section 901.